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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,130	02/09/2004	Anthony Edward Pullen	H-412	2129
26245	7590	04/05/2005	EXAMINER	
DAVID J COLE E INK CORPORATION 733 CONCORD AVE CAMBRIDGE, MA 02138-1002			CHOI, WILLIAM C	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SM

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/708,130	PULLEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	William C. Choi	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) 36-43 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-28 is/are allowed.
- 6) ☒ Claim(s) 29,31 and 32 is/are rejected.
- 7) ☒ Claim(s) 30 and 33-35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. ____.  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-35, drawn to electrophoretic medium compositions, classified in class 430, subclass 32.
- II. Claims 36-43, drawn to drawn to processes involving coating electrophoretic pigment particles, classified in class 204, subclass 471.

The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product can be made by another and materially different process such as deposition.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with David J. Cole on March 31, 2005, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-35. Affirmation of this election must be made by applicant in replying to this

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Office action. Claims 36-43 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Priority***

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swiler et al (U.S. 6,582,814 B2).

In regard to claim 29, Swiler et al discloses copper chromite particles (column 6, lines 1-3), but does not specifically disclose wherein said particles have a silica coating. However, Swiler does teach wherein it is desirable to apply silica coatings to said particles for the purpose of providing protective layers to prevent unfavorable reactions

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between said particles and mediums in which said particles are being used (column 3, lines 54-62).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the copper chromite particles of Swiler et al to have a silica coating since he teaches wherein it is desirable to apply silica coatings to said particles for the purpose of providing protective layers to prevent unfavorable reactions between said particles and mediums in which said particles are being used.

Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swiler et al in view of Herman et al (U.S. 3,884,871).

In regard to claims 31 and 32, Swiler et al teaches wherein copper chromite particles have coatings as set forth above and further teaches wherein said coatings are chemically bonded to the particles (column 3, line 63 – column 4, line 4), but does not specifically disclose wherein the coating is a polymer. Swiler et al does however, teach wherein said coatings can be other elements, compounds or organic materials (column 3, lines 57-59) and within the same field of endeavor, Herman et al teaches wherein it is desirable to chemically bond pigment particles with polymers to facilitate increased dispersion within their respective mediums (column 1, line 23 – column 2, line 2).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the copper chromite to have a polymer chemically bonded to it since Swiler et al teaches wherein the coatings of his invention can be other elements, compounds or organic materials and within the same field of endeavor,

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Herman et al teaches wherein it is desirable to chemically bond pigment particles with polymers to facilitate increased dispersion within their respective mediums.

***Allowable Subject Matter***

Claims 1-28 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claims 1-28: an electrophoretic medium comprising at least one electrically charged particles in a suspending fluid as claimed, specifically wherein said particle comprises copper chromite.

Claims 30 and 33-35 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to teach a combination of all the claimed features as presented in claim 30: a copper chromite particle having a silica coating as claimed, specifically wherein said particle has a diameter in the range of about 0.25 to about 5 $\mu$ m.

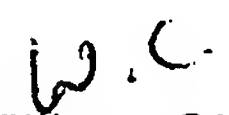
The prior art fails to teach a combination of all the claimed features as presented in claims 33-35: a copper chromite particle having a polymer chemically bonded to it as claimed, specifically wherein the polymer comprises from about 5 to 500 mg m<sup>-2</sup> of the surface area of the particle.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Choi whose telephone number is (571) 272-2324. The examiner can normally be reached on Monday-Friday from about 9:00 am to 6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
William Choi  
Patent Examiner  
Art Unit 2873  
March 31, 2005

  
Georgia Epps  
Supervisory Patent Examiner  
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